

1.0 INTRODUCTION

The WRIA 20 Planning Unit received a supplemental multi-purpose storage grant to assess groundwater resources and groundwater supply potential, and to evaluate the use of artificial recharge and Aquifer Storage and Recovery (ASR) to supplement existing water supplies for drinking water, habitat, and/or recreation. In WRIA 20, groundwater development is geographically constrained, and is concentrated in the lower portions of the major river valleys such as the Quillayute, Calawah, and Hoh Rivers, along major transportation corridors such as Highway 101, or near lakes such as Lake Pleasant or Lake Ozette. These areas are also the areas where future growth and water demand will likely be concentrated. Many of the aquifers used for groundwater supply are shallow, susceptible to contamination, or are potentially under the influence of surface water. In some areas, the likelihood of drilling a dry or low-producing well that could be seasonally dry is high. In addition, little is known concerning the general hydrogeologic conditions in most areas of WRIA 20 where population and groundwater withdrawals are concentrated.

1.1 Scope of Assessment

This first step of assessment is focused primarily on evaluating ASR. The WRIA 20 Planning Unit selected seven areas for detailed assessment of groundwater storage (Figure 1-1):

- Forks Prairie;
- Quillayute Prairie;
- Lower and Upper Hoh (two separate areas);
- Three Rivers;
- Beaver/Lake Pleasant; and,
- Ozette/Trout Creek.

These areas were selected based on the following criteria:

- Existing groundwater development and anticipated future groundwater development; and,
- Aquatic habitat needs.

The findings of the first step are reported in Chapter 2. Given the limited potential for ASR in WRIA 20, additional concepts were developed in Planning Unit meetings for evaluation in Step 2. Consensus was obtained through several Planning Unit meetings and discussions with individual Planning Unit members to refocus the storage assessment effort into the following options, which are individually covered in their own chapters in this report:

- Geomorphological Assessment of Big River (Chapter 3);
- Municipal Water Supply for the City of Forks (Chapter 4); and,
- Water Supply for Hoh River Fish (Chapter 5).

1.2 Authorization, Acknowledgements and Limitations

This work was authorized by Val Streeter of Clallam County on behalf of the WRIA 20 Planning Unit. The contract between Clallam County and Golder Associates Inc. (Golder) was signed on May 18, 2004. Amendments to this contract were signed on November 9, 2004 and April 12, 2005 commissioning this Multi-Purpose Storage Assessment.

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Val Streeter is the Project Manager on behalf of Clallam County and the WRIA 20 Planning Unit. Bob Duffy is the Ecology Watershed Lead. The principal Golder staff involved in this project are Chris Pitre (project manager), Andreas Kammereck (geomorphology) and Tim White (hydrogeologist).

This work was conducted according to generally accepted professional practices within the limitations of readily available information, budget and schedule. This preliminary report has been prepared exclusively for the use of WRIA 20 for specific application to this project. Our conclusions and recommendations are based on observations made from review of the available existing information. New information may warrant revision of the findings.